

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A method ~~of delivering multimedia content in the form of multimedia asset data files using a video-on-demand (“VOD”) management system, the method~~ comprising:

receiving metadata associated with a multimedia asset data file ~~from~~ provided by at least one of a content provider and a multiple ~~systems~~ service/systems operator (“MSO”);

coordinating uploading the multimedia asset data file and associated metadata to a VOD server maintained by the MSO, wherein ~~uploading the multimedia asset data file~~ coordinating uploading comprises

scheduling ~~the~~ uploading of the multimedia asset data file and associated metadata to a server maintained by the MSO, and

tracking ~~the~~ uploading of the multimedia asset data file and associated metadata to the server ~~maintained by the MSO~~; and

providing usage reports relating to usage of multimedia asset data files by end users of the MSO.

2. (currently amended) The method of claim 1, wherein ~~the~~ metadata ~~associated with a plurality of multimedia asset data files are received from~~ provided by at least one of a plurality of content providers and a plurality of MSOs.

3. (currently amended) The method of claim 1, wherein tracking ~~the~~ uploading ~~step~~ comprises:

tracking receipt of the multimedia asset data file ~~from the content provider~~ in elements, the elements comprising at least one of a feature file, a preview file, a graphic file, and associated basic metadata, wherein the associated basic metadata comprises information on the elements used to confirm delivery of the elements;

receiving an identification of the MSOs scheduled to receive the multimedia asset data file from the content provider; and

receiving delivery dates for delivery of the multimedia asset data file to each of the MSOs ~~identified by the content provider~~.

4. (currently amended) The method of claim 1, wherein ~~the uploading step~~ coordinating uploading comprises coordinating uploading is conducted using a delivery group, the delivery group comprising a plurality of multimedia asset data files.

5. (currently amended) The method of claim 1, further comprising:  
registering the multimedia asset data file in order to identify the file, wherein registering the multimedia asset data file comprises:

assigning a provider ~~identification number~~ identifier to a content provider, and  
assigning a unique identifier to a multimedia asset data file provided by the content provider based upon the provider ~~identification number~~ identifier and a provider asset identification, the provider asset identification being included with the multimedia asset data file by the content provider.

6. (currently amended) The method of claim 1, further comprising, ~~prior to the upload step, the steps of:~~

staging the multimedia asset data file by entering a name for the multimedia asset data file into a staging directory; and

providing a master ~~XML~~ markup language file for the multimedia asset data file, the master ~~XML~~ markup language file comprising distribution information, scheduling information, content information, and an identification for the multimedia asset data file, wherein the content information comprises data to enable retrieval of a plurality of elements to assemble the multimedia asset data file.

7. (currently amended) The method of claim 6, wherein the elements used to assemble the multimedia asset data file comprise at least one of a movie/feature file, a preview file, and a graphic file.

8. (currently amended) The method of claim 1, wherein the multimedia asset data file comprises a plurality of elements, and ~~the upload step~~ tracking uploading comprises:

tracking transmission of the elements of the multimedia asset data file to the MSO using a pitcher appliance;

tracking receipt of the elements of the multimedia asset data file using a catcher appliance; and

~~transmitting~~ receiving an alarm signal ~~to the VOD management system if any one of the~~ elements of the multimedia asset data file ~~are~~ is not successfully received by the catcher appliance.

9. (currently amended) The method of claim 1, wherein the multimedia asset data file is identified with an asset URL locator, and ~~the upload step~~ tracking uploading comprises:

providing the asset URL locator to the VOD server;

providing a schedule to the VOD server comprising instructions for the VOD server to request the multimedia asset data file from a catcher and metadata from the VOD management system; and

tracking retrieval of the multimedia asset data file and associated metadata by initiating file transfers using the asset-URL locator.

10. (original) The method of claim 9 wherein the file transfer is a file transfer protocol ("FTP") transfer.

11. (currently amended) The method of claim 1, wherein ~~the multimedia asset data file comprises a feature element identified by a first asset URL, a preview element identified by a second asset URL, and a graphic element identified by a third asset URL, and the upload step~~ tracking uploading further comprises:

providing ~~the first, second, and third asset URLs~~ an asset locator identifying an element of the multimedia asset data file to the VOD server[;], the VOD server submitting the ~~first asset URL locator from the VOD server~~ to a catcher appliance;

tracking transmission of the ~~feature~~ element from the catcher appliance to the VOD server using the first asset URL locator to retrieve the ~~feature~~ element;

~~submitting the second asset URL from the VOD server to the catcher appliance;~~

~~tracking transmission of the preview element from the catcher appliance to the VOD~~

~~server using the second asset URL to retrieve the preview element;  
submitting the third asset URL from the VOD server to the catcher appliance; and  
tracking transmission of the graphic element from the catcher appliance to the VOD  
server using the third asset URL to retrieve the graphic element.~~

12. (currently amended) The method of claim 11, wherein tracking uploading further comprises ~~comprising~~:

~~determining whether the feature element is properly received by the VOD server and  
transmitting~~ receiving an alarm signal ~~to the VOD management system~~ from the VOD server if the feature element was not properly received.

13. (currently amended) The method of claim ~~11~~ 12, wherein tracking uploading further comprises ~~comprising~~:

~~determining whether the preview element is properly received by the VOD server and  
transmitting an alarm signal to the VOD management system if the preview element was not  
properly received~~

performing a follow-up or diagnosis upon receiving the alarm indicating that the element  
was not properly received.

14. (currently amended) The method of claim 9, wherein the asset locator is an asset  
Uniform Resource Locator (URL) ~~comprising~~:

~~determining whether the graphic element is properly received by the VOD server and  
transmitting an alarm signal to the VOD management system if the graphic element was not  
properly received.~~

15. (currently amended) The method of claim 1, wherein providing usage reports comprises:

receiving from the VOD server ~~at regular intervals~~ data on feature elements requested by end users of the MSO;

creating a master reporting database using the data on feature elements requested by end users; and

generating a usage report using the data contained in the master reporting database.

16. (currently amended) The method of claim 15, wherein providing usage reports further comprising comprises:

restricting access by a content providers provider to the data contained in the master reporting database using business rules provided by the MSO.

17. (currently amended) The method of claim 15, wherein providing usage reports further comprising comprises:

analyzing the usage report to determine end user viewing characteristics; and  
generating an advertising play list targeted to an end user based upon the viewing characteristics of the end user, wherein the advertising play list comprises advertising selected based upon the viewing characteristics of the end user.

18. (currently amended) The method of claim 17, wherein providing usage reports further comprising comprises:

supplementing a multimedia asset data file with data contained in the usage report, wherein the usage report comprises usage data for the multimedia asset data file.

19. (currently amended) The method of claim 15, wherein providing usage reports further comprising comprises:

analyzing the usage report to determine end user viewing characteristics;  
selecting multimedia asset data files based upon end user viewing characteristics; and  
performing a campaign management function chosen from the group consisting of bundling selected multimedia asset data files, setting pricing for selected multimedia asset data files, and setting promotions for selected multimedia asset data files.

20. (currently amended) ~~A method of using a VOD management system to distribute multimedia asset data files from a plurality of content providers to a plurality of multiple systems operators ("MSOs"), the method comprising:~~

receiving a plurality of multimedia asset data files from a plurality of content providers;  
receiving metadata associated with the plurality of multimedia asset data files from at least one of the plurality of content providers and a plurality of MSOs;  
coordinating uploading the multimedia asset data files to video-on-demand ("VOD")

servers maintained by the MSOs using an asset URL locator assigned to each multimedia asset data file; and

tracking ~~the uploading of~~ the multimedia asset data files; ~~and~~  
providing ~~usage reports relating to usage of multimedia asset data files by end users of~~  
the MSOs.

21. (currently amended) The method of claim 20, further comprising:  
~~determining that~~ validating the multimedia asset data files ~~are successfully received from~~  
the content providers by ~~comparing~~ determining if the received metadata and multimedia asset  
data files comply with business rules provided by the MSOs.

22. (currently amended) The method of claim 20, wherein the coordinating uploading  
~~step~~ comprises:

coordinating uploading the associated metadata for the multimedia asset data files to the  
VOD servers;

distributing a localized master schedule to each MSO; and  
providing a schedule update ~~from the VOD management system~~ to each MSO at regular  
intervals.

23. (currently amended) The method of claim 22, wherein the tracking ~~step~~  
comprises:

tracking ~~the upload of~~ uploading the multimedia asset data files and the associated  
metadata to the VOD servers by reference to each MSO's localized master schedule; ~~and~~  
~~tracking the upload of the associated metadata to the VOD servers by reference to each~~  
~~MSO's localized master schedule.~~

24. (original) The method of claim 22, wherein each schedule update comprises  
instructions for inserting and deleting multimedia asset data files from each MSO's localized  
master schedule.

25. (New) A method comprising:  
ingesting content and metadata associated with the content provided by a content

provider;

coordinating distribution of the metadata and the content; and

coordinating uploading the metadata and the content to a server for delivery to an end user.

26. (New) The method of claim 25 further comprising:

providing visibility into usage of the content.

27. (New) The method of claim 25 wherein ingesting comprises:

registering the content;

coordinating accessing the content located in one of an internal location and an external location.

28. (New) The method of claim 27 wherein registering the content comprises:

assigning a provider identifier to the content provider; and

assigning a globally unique identifier to the content based on the provider identifier and a provider asset identifier.

29. (New) The method of claim 25 wherein ingesting comprises:

receiving business rules from a multiple service/systems operator (MSO); and

validating the metadata and the content using the business rules.

30. (New) The method of claim 29 wherein receiving the business rules comprises:

receiving the business rules including at least one of a rating filter, a pricing rule, a category rule, and a platform conversion rule.

31. (New) The method of claim 25 wherein ingesting comprises:

customizing an electronic program guide (EPG).

32. (New) The method of claim 25 wherein ingesting comprises:

providing an interface to allow a user to view and analyze metadata and scheduling information associated with the content.

33. (New) The method of claim 25 wherein coordinating the distribution comprises:  
interacting with an asset distribution system (ADS) to facilitate delivery of the content  
from a content provider to a multiple service/systems operator (MSO), the ADS including a  
pitcher and a catcher.

34. (New) The method of claim 33 wherein interacting with the ADS comprises:  
receiving information regarding when a transmission of an element of the content is  
initiated from the pitcher;  
requesting retransmission of the element if an alarm is received from the catcher; and  
tracking a request from a server to release the content received by the catcher; and  
tracking delivery of content from the catcher to the server.

35. (New) The method of claim 25 wherein coordinating uploading comprises:  
receiving a schedule request from a server;  
providing a customized or localized master schedule for a multiple service/systems  
operator (MSO) to the server, the master schedule having an asset locator;  
receiving a metadata locator corresponding to the content from the server;  
providing an asset locator to the server in response to the metadata locator, the server  
retrieving an element of the content from a catcher using the asset locator; and  
interacting with the server during transfer of the element of the content from the catcher  
to the server.

36. (New) The method of claim 35 wherein providing the asset locator comprises:  
re-transmitting the asset locator upon receiving an alarm from the server indicating that  
the asset locator is not received properly by the server.

37. (New) The method of claim 35 wherein interacting with the server comprises:  
performing a follow-up or diagnosis upon receiving an alarm from the server indicating  
that the element is not received properly by the server.

38. (New) The method of claim 26 wherein providing visibility into usage of the  
content comprises:



preparing a usage report;  
providing access to the usage report to a multiple service/systems operator (MSO) or a content provider.

39. (New) The method of claim 38 wherein preparing the usage report comprises:  
creating a master reporting database including usage information from across a MSO network.

40. (New) The method of claim 39 wherein preparing the usage report further comprises:

exporting the usage report to an analysis system.

41. (New) A content management system comprising:  
an external layer to interface to an application client;  
a component programmatic application program interface (API) coupled to the external layer to interface to a plurality of engines comprising:

a workflow engine to manage workflows of ingesting a content and metadata associated with the content provided by a content provider, coordinating distribution of the metadata and the content; and coordinating uploading the metadata and the content to a server for delivery to an end user; and  
a relational database to store the metadata.

42. (New) The system of claim 41 wherein the plurality of engines further comprises:  
a business objects engine to managing business rules associated with the content, the business rules being provided by a multiple service/system operator (MSO);  
a package engine to manage packaging the content;  
a scheduling engine to schedule deployment of the content;  
a platform converter engine to customize an electronic program guide (EPG) designated by the MSO; and  
a localization engine to localize the content.

43. (New) The system of claim 41 wherein the external layer comprises:

a Web service API to facilitate communication with an application used by one of a multiple service/system operator (MSO) and the content provider.

44. (New) The system of claim 43 wherein the Web service API performs operations comprising:

- registering the content;
- receiving a confirmation call from one of a pitcher and a catcher regarding status of transfer of an element of the content; and
- receiving a schedule request from the server for a schedule to distribute or upload the content.

45. (New) The system of claim 44 wherein the Web service API further performs operations comprising:

- receiving a metadata request from the server for localized package metadata.
- receiving a reporting call from the server to deliver usage report.

46. (New) A system comprising:

- a server;
- a distribution network coupled to the server to distribute a content provided by a content provider; and

- a content management system coupled to the server and the distribution network, the content management system comprising:

- an external layer to interface to an application client;
- a component programmatic application program interface (API) coupled to the external layer to interface to a plurality of engines comprising:
  - a workflow engine to manage workflows of ingesting the content and metadata associated with the content, coordinating distribution of the metadata and the content; and coordinating uploading the metadata and the content to the server for delivery to an end user; and
  - a relational database to store the metadata.

47. (New) The system of claim 46 wherein the plurality of engines further comprises:

a business objects engine to managing business rules associated with the content, the business rules being provided by a multiple service/system operator (MSO);  
a package engine to manage packaging the content;  
a scheduling engine to schedule deployment of the content;  
a platform converter engine to customize an electronic program guide (EPG) designated by the MSO; and  
a localization engine to localize the content.

48. (New) The system of claim 46 wherein the external layer comprises:  
a Web service API to facilitate communication with an application used by one of the MSO and the content provider.

49. (New) The system of claim 48 wherein the Web service API performs operations comprising:  
registering the content;  
receiving a confirmation call from one of a pitcher and a catcher regarding status of transfer of an element of the content; and  
receiving a schedule request from the server for a schedule to distribute or upload the content.

50. (New) The system of claim 49 wherein the Web service API further performs operations comprising:  
receiving a metadata request from the server for localized package metadata.  
receiving a reporting call from the server to deliver usage report.

51. (New) The system of claim 46 wherein the distribution network comprises:  
a pitcher used by the content provider to transmit the content and the metadata to a multiple service/systems operator (MSO) via a distribution channel;  
a catcher used by the MSO to receive transmission from the pitcher via a downlink channel.

52. (New) The system of claim 51 wherein the distribution channel comprises a

satellite uplink facility and the downlink channel comprises a satellite downlink facility.

53. (New) The system of claim 51 wherein one of the pitcher and the catcher communicates with the content management system via a network connection.

54. (New) The system of claim 51 wherein the catcher receives the content locally using one of a physical medium, a local network, and a terrestrial-based network.

55. (New) The system of claim 46 wherein the content is one of a video-on-demand (VOD) content, an asset data file, a broadband content, and a network content.